IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. Patent Application of	)
	)
HIRAYAMA et al.	)
	)
Application Number: -To be Assigned	)
	)
Filed: Concurrently Herewith	)
	)
For: MAGNETIC RECORDING MEDIUM AND MAGNETIC RECORDING SYSTEM USING THE SAME	)

Honorable Assistant Commissioner
for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Applicant has amended the claims in order to make them correct in accordance with standard U.S. practice. Prior to an examination on the merits, please amend the above-identified application as follows:

IN THE CLAIMS:

Please substitute the claims with the following amended claims:

8. (Amended) A magnetic storage which comprises a magnetic recording medium, a drive unit to turn the magnetic recording medium, a magnetic head consisting of a writing part and a reading part, a means to move the magnetic head relative to the magnetic recording medium, and a signal processing unit to send and receive signals to and from the magnetic head, wherein the reading part of said magnetic head is a giant magneto-resistive effect element or has a tunnel junction which produces the magneto-resistive effect, and said magnetic recording medium which is comprised of

a substrate, an underlayer formed over said substrate,

a first magnetic layer composed of Co, Pt, and Cr, which is formed on said underlayer,

a non-magnetic intermediate layer containing at least one element selected from the group consisting of Ru, Ir, and Rh, which is formed on said first underlayer, and

a second magnetic layer containing Co as main component, wherein

said first magnetic layer and said second magnetic layer being magnetized in the antiparallel direction in the absence of an applied magnetic field, and the amount of Pt contained in said first magnetic layer is no less than 3 at% and no more than 9 at%.

9. (Amended) A magnetic storage which comprises a magnetic recording medium, a drive unit to turn the magnetic recording medium, a magnetic head consisting of a writing part and a reading part, a means to move the magnetic head relative to the magnetic recording medium, and a signal processing unit to send and receive signals to and from the magnetic head, wherein the reading part of said magnetic head is a giant magneto-resistive effect element or has a tunnel junction which produces the magneto-resistive effect, and said magnetic recording medium is one which is comprised of

a substrate and a magnetic recording layer formed thereon with an underlayer interposed between them, wherein

said magnetic layer includes;

a first magnetic layer containing Pt formed on said underlayer,

a second magnetic layer, and

a non-magnetic intermediate layer formed between said first magnetic layer and said second magnetic layer,

said first magnetic layer and said second magnetic layer being magnetized in the antiparallel direction in the absence of an applied magnetic field, the amount of Pt contained in said first magnetic layer is no less than 3 at% and no more than 9 at%.

REMARKS

Applicant has amended claims 8 and 9. No new matter has been added to the application as a result of this amendment.

In view of the above amendments and Applicant's comments stated herein, Applicant respectfully requests an early and favorable action on the merits.

Respectfully submitted,

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Marked Up Version of the Claims

8. A magnetic storage which comprises a magnetic recording medium, a drive unit to turn the magnetic recording medium, a magnetic head consisting of a writing part and a reading part, a means to move the magnetic head relative to the magnetic recording medium, and a signal processing unit to send and receive signals to and from the magnetic head, wherein the reading part of said magnetic head is a giant magneto-resistive effect element or has a tunnel junction which produces the magneto-resistive effect, and said magnetic recording medium is one which is ~~defined in Claim 1~~ **comprised of**

a substrate, an underlayer formed over said substrate,

a first magnetic layer composed of Co, Pt, and Cr, which is formed on said underlayer,

a non-magnetic intermediate layer containing at least one element selected from the group consisting of Ru, Ir, and Rh, which is formed on said first underlayer, and

a second magnetic layer containing Co as main component, wherein

said first magnetic layer and said second magnetic layer being magnetized in the antiparallel direction in the absence of an applied magnetic field, and the amount of Pt contained in said first magnetic layer is no less than 3 at% and no more than 9 at%.

9. A magnetic storage which comprises a magnetic recording medium, a drive unit to turn the magnetic recording medium, a magnetic head consisting of a writing part and a reading part, a means to move the magnetic head relative to the magnetic recording medium, and a signal processing unit to send and receive signals to and from the magnetic head, wherein the reading part of said magnetic head is a giant magneto-resistive effect element or has a tunnel junction which produces the magneto-resistive effect, and said magnetic recording medium is one which is ~~defined in Claim 2~~ **comprised of**

a substrate and a magnetic recording layer formed thereon with an underlayer interposed between them, wherein

said magnetic layer includes

a first magnetic layer containing Pt formed on said underlayer,

a second magnetic layer, and

a non-magnetic intermediate layer formed between said first magnetic layer and said second magnetic layer,

said first magnetic layer and said second magnetic layer being magnetized in the antiparallel direction in the absence of an applied magnetic field, the amount of Pt contained in said first magnetic layer is no less than 3 at% and no more than 9 at%.